



MODULE SPECIFICATION

Part 1: Information			
Module Title	Renewable Energy and Carbon Futures		
Module Code	UBGLW7-15-M	Level	Level 7
For implementation from	2019-20		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Environmental Mgmt		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See Learning Outcomes.</p> <p>Outline Syllabus: The syllabus includes:</p> <p>UK energy policy. UK energy regulatory framework.</p> <p>Carbon accounting and management.</p> <p>Emissions trading. Renewables obligation.</p> <p>Renewable energy subsidies; the feed in tariff and the renewable heat incentive.</p> <p>The code for sustainable homes.</p> <p>The following power generation and supply systems: fossil fuel; nuclear; solar; wind; tidal and hydro; wave; biomass.</p> <p>Information to include the history of development of the particular technology, the level of maturity and degree of penetration in the UK marketplace now, and its potential for the future, the technology itself including relevant energy equations and/or chemical interactions.</p>

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Design, installation and life cycle cost evaluation of micro-technologies.

Preparing for and presenting a defended poster.

Teaching and Learning Methods: See Assessment Strategy

Part 3: Assessment

Formative assessment

A field trip will form the basis of information from which a poster will be prepared and defended as a mock to the later summative assessed defended poster. Students will mark each other's work using the same marking schedule used to assess the summative defended poster. Verbal feedback will be also be provided by the module leader occurring as a set of recommendations for improvement of performance.

Summative assessment

Component A – Defended poster (50% of module mark) Learning outcomes 1 2 3 4 5 6

Component B – 2000-word sustainability report (50% of module mark) Learning outcomes 1 3 4 5

The students will be required to undertake research on their chosen topic and prepare an individual poster for presentation. Poster outline guidance is provided both in booklet form and via academic and technical support. Students will have the opportunity of preparing and presenting a mock poster to their peers and the module leader for feedback purposes. The students, in presenting their posters, will have to demonstrate an in depth understanding of their chosen sustainable technology, the relevant policy and law, and, show competence in key presenting, communication and analytical skills.

The students will be required to undertake research on their chosen topic and prepare a 2,000-word energy report which must be to professional technical standards with thorough source attribution and clarity in communication.

Resit: Defended poster
2,000 word report

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B	✓	50 %	Sustainability report (2000 words)
Poster - Component A		50 %	Defended poster (10 mins)
Resit Components	Final Assessment	Element weighting	Description
Report - Component B	✓	50 %	Sustainability report (2000 words)
Poster - Component A		50 %	Defended poster (10 mins)

Part 4: Teaching and Learning Methods

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:	
	Module Learning Outcomes	Reference
	Critique UK energy policy	MO1
	Critically discuss and evaluate the regulatory framework in relation to electrical energy generation supply and demand	MO2

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	Demonstrate an understanding of current, and predict future, energy generation technologies	MO3
	Demonstrate an understanding of approaches to carbon management and carbon pricing	MO4
	Apply life cycle cost analysis to a range of energy technologies	MO5
	Research and interpret data from a range of different sources	MO6
Contact Hours	Independent Study Hours:	
	Independent study/self-guided study	118
	Total Independent Study Hours:	118
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	32
	Total Scheduled Learning and Teaching Hours:	32
	Hours to be allocated	150
	Allocated Hours	150
Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/modules/ubglw7-15-m.html</p>	

Part 5: Contributes Towards

This module contributes towards the following programmes of study: